

60450200

 CONTROL DATA

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## **MODIFY INSTANT**

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**CDC® OPERATING SYSTEM:  
NOS 1**

## REVISION RECORD

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## PREFACE

This instant provides condensed descriptions of Modify, the program library maintenance utility. Modify is part of the Network Operating System (NOS) for CDC® CYBER 170 Series Computer Systems; CDC® CYBER 70 Series, Models 71, 72, 73, and 74 Computer Systems; and CDC® 6000 Series Computer Systems.

This instant is designed for the experienced NOS applications or systems programmer who is familiar with Modify. It is intended to serve the user as a quick reference tool, not as a stand-alone document.

Modify provides a means of maintaining source decks in a conveniently updatable and compressed format. For further information, refer to the NOS Modify Reference Manual (publication number 60450100).

This product is intended for use only as described in the Modify Reference Manual. Control Data cannot be responsible for the proper functioning of undescribed features or undefined parameters.

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## **DIRECTIVES**

## DIRECTIVE FORMAT

The format for a Modify directive is as follows:

*dirname p <sub>1</sub> ,p <sub>2</sub> ,...,p <sub>n</sub>	* Prefix character beginning in column 1 (defined by Modify as asterisk, changed with PREFIX or PREFIXC directives)
dirname	Directive name beginning in column 2 and followed by a separator
p <sub>i</sub>	Optional directive parameters

The directive name and parameters are separated by any character with a display code value of 55<sub>8</sub> or greater, that is, a character other than:

: A through Z 0 through 9 + - \* / ( ) \$ = -

## LINE IDENTIFIER

Modify line identifiers have the following format.

modname.number	
modname.	1- to 7-character name of a modification set or deck. Legal characters are A through Z, 0 through 9, and + - * / ( ) \$ =. A period terminates the modname.
number	Decimal ordinal of the line within the modification set or deck. Any character other than 0 through 9 terminates this ordinal.

The abbreviated form of the line identifier is simply the number.

## DIRECTIVE TYPES

### INITIALIZATION

CREATE	Converts decks to program library format for modification
OPLFILE	Declares additional program library files as input
COPY	Copies one or more records from named file to old program library

COPYPL	Copies one or more records from named file to an internal scratch file which is merged with program library
W1DTH	Defines the number of columns preceding the sequencing information on the compile file and source output file
NOSEQ	Specifies no sequence information on compile file
<b>MODIFICATION</b>	
1DENT	Specifies modname to be assigned to new modification set
1GNORE	Ignores modifications for the named deck
DECK	Identifies deck to be modified
MODNAME	Identifies modification set within deck to be modified
DELETE or D	Identifies line to be deactivated
RESTORE	Identifies line to be reactivated
INSERT or I	Identifies lines following as insertion lines
YANK	Removes effects of a modification set
UNYANK	Restores effects of a modification set
PURDECK	Permanently purges decks from program library
<b>SELECTIVE EDIT</b>	
ED1T	Names decks for which modification (editing) is to take place and written on the compile file, source output file, or new program library, depending on control statement options

## FILE MANIPULATION

READ	Reads record or group of records from specified file
READPL	Reads deck or portion of deck from program library
BKSP	Backspaces specified number of records on file
SKIP	Skips forward specified number of records on file
SKIPR	Skips forward past the specified record on file
REWIND	Rewinds named files
RETURN	Returns named files to system

File manipulation is illegal on files defined by Modify control statement options.

## COMPILE FILE

CALL	Writes called deck onto compile file
IFCALL	Writes called deck onto compile file if symbol is defined
NIFCALL	Writes called deck onto compile file if name is not defined
CALLALL	Writes all decks onto compile file that have deckname beginning with specified character string

### NOTE

A common deck cannot call another common deck. If a CALL, IFCALL, NIFCALL, or CALLALL directive is in a common deck, it is ignored.

IF	Includes lines in compile file if specified attribute is true and until a reversal or termination directive is encountered (ELSE or ENDIF).
ELSE	Reverses an IF directive conditional range.
ENDIF	Terminates an IF directive conditional range.

COMMENT	Generates COMMENT pseudo instruction for COMPASS
WIDTH	Defines number of columns preceding sequence information on compile file and source file
NOSEQ	Specifies no sequence information on compile file
SEQ	Specifies sequence information on compile file
WEOR	Writes end of record on compile file
CWEOR	Writes end of record on compile file if the buffer is not empty
WEOF	Writes end of file on compile file
 <b>SPECIAL</b>	
	Inserts comment on listing
INWIDTH	Sets width of source text lines and insertion text lines.
PREFIX	Changes prefix character for directives other than compile file directives
PREFIXC	Changes compile file prefix character rather than directives file prefix character
DEFINE	Defines a name and associated value under which subsequent IFCALL directive may cause a common deck to be written to the compile file or NIFCALL may prevent a common deck from being written

MOVE	Reorders decks on new program library
UPDATE	Specifies editing sequence and modification set numbering

## ALPHABETIZED LIST OF DIRECTIVES

*BKSP file, n	Backspaces specified number of records on file. If n is omitted, one record is backspaced.
*CALL deckname	Writes copy of called common deck onto compile file.
*CALLALL string	Writes all decks onto compile file that have decknames beginning with specified character string.
*COMMENT comments	Generates COMMENT pseudo instruction for COMPASS and inserts OPL creation date and last modification date.
*COPY file, deckname	Copies one or more records from named file to OPL (P parameter) for random access. Copying ends with deckname; if deckname is omitted or not found on file, the remainder of the file is copied. Only one copy directive is allowed. EVICT is performed on OPL (P parameter) before copy; copy must precede other initialization directives if used.
*COPYPL file, deckname	Copies one or more records from named file to an internal scratch file which is merged with program library. Copying ends with deckname; if deckname is omitted or not found on file, the remainder of the file is copied.

*CREATE file	Converts source decks to program library format, initially used for creating library, adding decks, or replacing decks. If a deck duplicates one on the program library, the new deck takes precedence.
*CWEOR	Writes end of record on compile file if the buffer is not empty.
*DECK deckname	Identifies deck to be modified; precedes modifications to the deck.
*DEFINE name, value	Defines a 1- to 7-character name and a value for use in subsequent IFCALL, NIFCALL, or IF compile-file directives. If value is omitted, name is defined with value zero; if present, value must not exceed 177777 <sub>8</sub> .
*DELETE c	Identifies line to be deactivated.
*D c	
*DELETE c <sub>1</sub> , c <sub>2</sub>	Identifies first and last lines of sequence of lines to be deactivated; lines to be inserted optionally follow.
*D c <sub>1</sub> , c <sub>2</sub>	
*EDIT p <sub>1</sub> , p <sub>2</sub> , ..., p <sub>n</sub>	Names decks for which modification (editing) is to take place and which is written on the compile file, source output file, or new program library, depending on control statement options. p <sub>i</sub> can be a single deckname or a range of decknames specified as deckname <sub>1</sub> .deckname <sub>2</sub> .
*ELSE	Reverses effect of previous IF directive. If encountered when no IF is in progress, ELSE is diagnosed as an error.
*ENDIF	Terminates effect of previous IF directive. If encountered when no IF is in progress, ENDIF is diagnosed as an error.

*IDENT modname	Specifies 1- to 7-character modname to be assigned to new modification set.
*IF atr, name, value	Conditionally inserts lines which follow directive onto compile file if condition specified by atr (and optionally value) is satisfied. If condition is not satisfied, lines are skipped. Insertion/skipping effect reverses or terminates when ELSE or ENDIF directive is encountered. Attribute (atr) must be one of:
DEF	(name defined)
UNDEF	(name not defined)
EQ	(name equal to value)
NE	(name not equal to value)
*IFCALL name, deckname	Writes copy of called deck onto compile file if 1- to 7-character name is defined.
*IGNORE deckname	Causes Modify to ignore subsequent modifications for the named deck. Normal processing of input stream resumes with next IDENT, DECK, or EDIT directive.
*INSERT c	Identifies lines following as insertion lines to be placed after specified line.
*I c	
*INWIDTH n	Sets width of source text lines and insertion text lines (maximum is 100); width is preset to 72.
*MODNAME modname	Identifies modification set within deck to be modified. Subsequent modification directives need to use the sequence number only. This modname is assumed.

*MOVE dname <sub>r</sub> , dname <sub>1</sub> , dname <sub>2</sub> , ..., dname <sub>n</sub>	Enables reordering of decks while producing a new program library. Decks dname <sub>i</sub> are placed after dname <sub>r</sub> on the new library.
*NIFCALL name, deckname	Writes copy of called deck onto compile file if 1- to 7-character name is not defined.
*NOSEQ	Specifies no sequence information on compile file until an SEQ is encountered.
*OPLFILE file <sub>1</sub> , file <sub>2</sub> , ..., file <sub>n</sub>	Declares up to 20 additional program library files to be logically linked with OPL file declared on Modify control statement.
*PREFIX x	Identifies prefix character to be used in first column of directives other than compile file directives; a blank character is illegal.
*PREFIXC x	Identifies prefix character to be used in first columns of directives for compile file directives; a blank character is illegal.
*PURDECK dname <sub>1</sub> , dname <sub>2</sub> , ..., dname <sub>n</sub>	Purges named decks from new program library.
*PURDECK dname <sub>a</sub> , dname <sub>b</sub>	Purges decks dname <sub>a</sub> through dname <sub>b</sub> from new program library.
*READ file	Reads one directives input record from specified file.
*READ file, deckname	Reads one named record from specified file.

*READ file,*	Reads records from specified file starting with named record until zero-length record or end of file. The file must be in source file format, that is, the first word of the record is the record name.
*READPL deckname	Reads deck from program library.
*READPL deckname, c <sub>1</sub> , c <sub>2</sub>	Reads portion of deck starting with c <sub>1</sub> through c <sub>2</sub> from program library.
*RESTORE c	Identifies line to be reactivated; lines to be inserted optionally follow.
*RESTORE c <sub>1</sub> , c <sub>2</sub>	Identifies first and last lines of sequence lines to be reactivated; lines to be inserted optionally follow.
*RETURN file <sub>1</sub> , file <sub>2</sub> , ..., file <sub>n</sub>	Returns named files to system.
*REWIND file <sub>1</sub> , file <sub>2</sub> , ..., file <sub>n</sub>	Rewinds named files.
*SEQ	Specifies sequence information on compile file.
*SKIP file, n	Skips forward specified number of records on file. If n is omitted, one record is skipped.
*SKIPR file, rname	Skips forward past the specified record on file.
*UNYANK modname	Restores effects of a modification set modname previously yanked.
*UNYANK modname,*	Restores effects of modification set modname and all modification sets from modname on.

*UPDATE	Causes decks to be edited according to their sequence on the library and causes sequencing to continue across decks.
*WEOF	Writes end of file on compile file.
*WEOR	Writes end of record on compile file.
*WIDTH n	Defines the number of columns (maximum of 100) preceding the sequencing information on the compile file; width is preset to 72.
*YANK modname	Removes effects of a modification set modname.
*YANK modname,*	Removes effects of modname and all modification sets incorporated from modname on. Yanked sets are denoted by parentheses on listing.
*/ comments	Inserts comments on listing.

## **MODIFY CONTROL STATEMENT**

MODIFY (p<sub>1</sub>, p<sub>2</sub>, ..., p<sub>n</sub>)

p      Option  
      Option = value  
      Option = 0

<u>Option</u>		<u>Significance</u>
A	Compressed compile file	
	Omitted	Compile file is not in compressed format.
	A	Compile file is in compressed format.
C	Compile file output	
	Omitted or C	Compile output is written on file COMPILE.
	C=filename	Compile output is written on named file.
	C=0	No compile output.
CB	COMPASS binary output; meaningful with Q or X option only	
	Omitted or CB	COMPASS binary output is written on the load-and-go file (LGO).
	CB=filename	COMPASS binary output is written on the named file.
	CB=0	No binary output.
CG	COMPASS get text option; meaningful with Q or X option only; takes precedence over CS.	
	CG	Load systems text from SYSTEXT.
	CG=filename	Load systems text from named file.
	Omitted	Load systems text from overlay named in CS option.
CL	COMPASS list output; meaningful with Q or X option only.	
	CL	List output is written on OUTPUT file.
	CL=filename	List output is written on named file.

<u>Option</u>		<u>Significance</u>
	Omitted or CL=0	Short list instead of full list is generated on OUT- PUT file.
CS	COMPASS systems text; Q or X option only.	
	Omitted or CS	Systems text is on SYS- TEXT overlay
	CS=sname	Systems text name is sname.
	CS=0	No systems text.
CV	Character conversion; when this option is selected, compile file cannot be generated.	
	Omitted or CV=0	No conversion occurs.
	CV=63	64-character set program library is converted to a 63-character set library.
	CV=64	63-character set program library is converted to a 64-character set library.
D	Debug	
	Omitted	A directive error aborts the job.
	D	An error does not abort the job.
F	Full edit	
	Omitted	Decks edited are deter- mined by the U parameter or by EDIT directives.
F		All decks on the library are edited and written on new program library, compile file, and source file if the respective options are on.
I	Directive input	
	Omitted or I	Directives are on file INPUT.
	I=filename	Directives are on named file.
	I=0	No directive input.

<u>Option</u>	<u>Significance</u>
L	List output
Omitted or L	List output is written on job OUTPUT file.
L=filename	List output is written on the named file.
L=0	Modify does not generate a list output file.
LO	List options
Omitted or LO	List options E, C, T, M, W, D, and S are selected.
LO=c <sub>1</sub> c <sub>2</sub> ...c <sub>n</sub>	Each character in string selects an option to a maximum of seven options. Characters must not be separated.
<u>Option</u>	<u>Significance</u>
A	List active lines in deck.
C	List directives other than INSERT, DELETE, RESTORE, MOD-NAME, I, or D.
D	List deck status.
E	List errors.
I	List inactive lines in deck.
M	List modifications performed.
S	Include statistics on listing.
T	List text input.
W	List compile file directives.

<u>Option</u>	<u>Significance</u>
N	New program library output
N	New program library is written on file NPL.
N=filename	New program library is written on named file.
Omitted or N=0	Modify does not generate a new program library.
NR	No rewind of compile file
Omitted	Compile file is rewound at beginning and end of Modify run.
NR	Compile file is not rewound at the beginning or the end of Modify run.
P	Program library input
Omitted or P	Program library is on file OPL.
P=filename	Program library is on named file.
P=0	No program library input file.
Q	Execute named program
Omitted or Q=0	Assembler or compiler is not automatically called at end of Modify run.
Q=program	At beginning of Modify run, Modify sets LO=E and sets the A parameter. At the end of the run, Modify calls the assembler or compiler named program.
Q	At the beginning of the Modify run, Modify sets LO=E and sets the A parameter. At the end of the run, Modify calls the COMPASS assembler. When this option is selected, the CB,

<u>Option</u>	<u>Significance</u>
	CL, CS, and CG parameters are meaningful. Input is assumed to be COMPILE. All other COMPASS parameters are set by default.
S	Source output
S	Source output is written on file SOURCE.
S=filename	Source output is written on named file.
Omitted or S=0	Modify does not generate a source output file.
U	Update edit
Omitted	Decks to be edited are determined by EDIT directives or by the F parameter.
U	Only decks for which the directives file contains DECK directives are edited and written on the compile file, new program library, and source file. However, if F is also specified, it takes precedence.
X	Execute named program; directives file and list output file are rewound. Same as Q option, except Modify directives input (I parameter) and list output (L parameter) files are rewound before processing.
Z	Directive on Modify control statement
Omitted	Directives input is specified by I option.

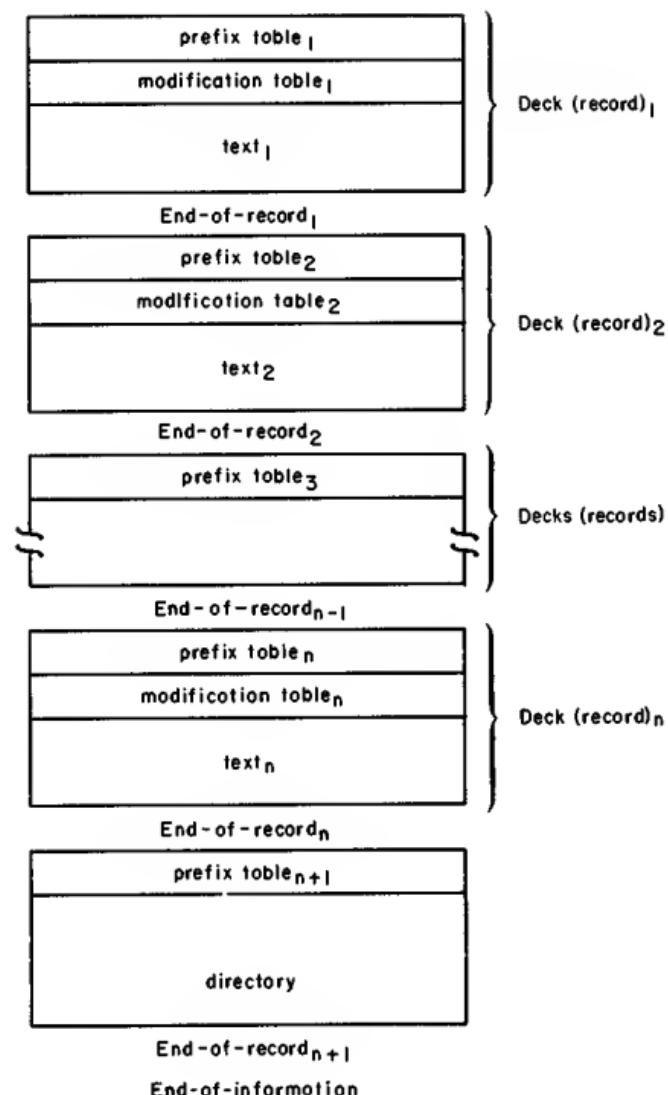
<u>Option</u>	<u>Significance</u>
Z	The Modify control statement contains the input directives following the control statement terminator; the I parameter is ignored, if present. This eliminates the need for using a separate input file for the directives when only a few directives are required.

**NOTE**

Do not place a control statement terminator after the directives.

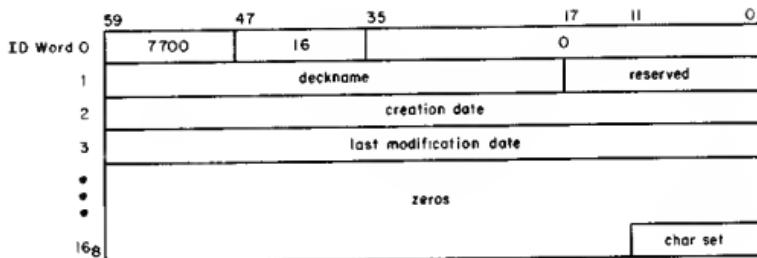
## **FILE FORMATS**

# PROGRAM LIBRARY FILE



## DECK RECORDS

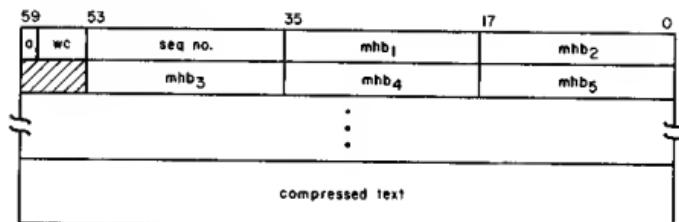
### PREFIX TABLE FORMAT



<u>Word</u>	<u>Bits</u>	<u>Field</u>	<u>Description</u>
ID	59-48	Table type	Identifies table as prefix table.
	47-36	wc	Word count; length of table is 16 <sub>8</sub> words.
	35-00	none	Reserved for future system use.
1	59-18	deckname	Name of deck obtained for source deck identification line; 1 to 7 characters.
	17-00	none	Reserved for future system use.
2	59-00	creation date	Date that deck was created. Format of date is: $\Delta$ yr/mo/dy.
3	59-00	latest modification date	Date of most recent entry in modification table. Format of the date is the same as for creation date.
16 <sub>8</sub>	11-00	char set	Character set used in creation of library. 0000 63-character set 0064 <sub>8</sub> 64-character set

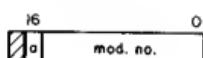
## TEXT FORMAT

Each line has the following format.



<u>Bits</u>	<u>Field</u>	<u>Description</u>
59	a	Activity bit: 0 Line is inactive 1 Line is active
58-54	wc	Number of words of compressed text.
53-36	seq. no.	Sequence number of line (octal) according to position in deck or modification set.
35-18 and subsequent 18-bit bytes	mhb <sub>i</sub>	Modification history byte. Modify creates a byte for each modification set that changes the status of the line. Modification history bytes continue to a zero byte. Since this zero byte could be the first byte of a word and the compressed line image begins a new word, the modification history portion of the text could terminate with a zero word.

The format of mhb<sub>i</sub> is:



<u>Bits</u>	<u>Field</u>	<u>Description</u>
a		Activate bit: 0 Modification set deactivated the line. 1 Modification set activated the line.
mod. no.		Index to the entry in the modification table. This entry contains the name of the modification set that changed the line status. Mod. no. of zero indicates the deckname.

#### MODIFICATION TABLE FORMAT

ID Word 0	59	47	17	11	0
	700x	reserved			
1		modname <sub>1</sub>	y	0	
2		modname <sub>2</sub>	y	0	
3			⋮		
$\ell - 1$		modname <sub><math>\ell - 1</math></sub>	y	0	
$\ell$		modname <sub><math>\ell</math></sub>	y	0	

<u>Word</u>	<u>Bits</u>	<u>Field</u>	<u>Description</u>
ID	59-48	Table type	Identifies table as modification table. The least significant digit indicates whether the deck is common or not common as follows: 1 Deck is not common 2 Deck is common
47-12	none		Reserved for future system use
11-00	$\ell$		Number of modification names in table

<u>Word</u>	<u>Bits</u>	<u>Field</u>	<u>Description</u>
word <sub>i</sub>	59-18	modname <sub>i</sub>	1- to 7-character modification set name. Each modification to a deck causes a new entry in this table.
16	y <sub>i</sub>		YANK flag
		0	Modifier not yanked
		1	Modifier yanked

## DIRECTORY RECORD

### IDENTIFICATION TABLE FORMAT

ID	Word 0	59	47	35	17	0
		7700	16		0	
1				name		reserved
2					date	
3						
•						
•						
16 <sub>8</sub>					zeros	

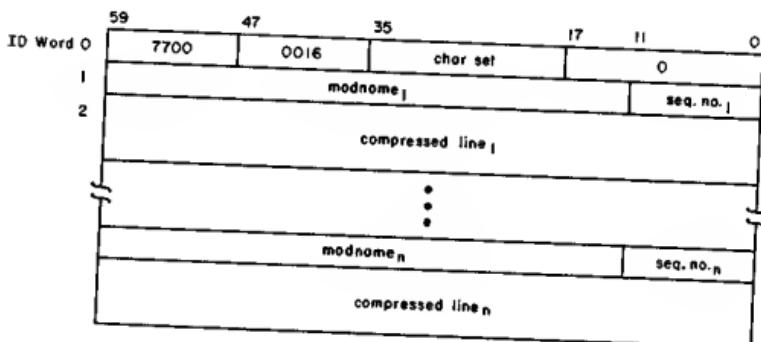
name      A Modify-generated directory has the name OPL

### DIRECTORY TABLE FORMAT

ID	Word 0	59	47	29	17	0
			7000	0		l
1				deckname <sub>1</sub>		type <sub>1</sub>
2			0		random address <sub>1</sub>	
3				deckname <sub>2</sub>		type <sub>2</sub>
4			0		random address <sub>2</sub>	
•				•		
•				•		
l-1				deckname <sub>l/2</sub>		type <sub>l/2</sub>
l			0		random address <sub>l/2</sub>	

<u>Word</u>	<u>Bits</u>	<u>Field</u>	<u>Description</u>
ID	59-54	Table type	Identifies table as program library directory
	17-00	$\ell$	Directory length excluding ID word
1, 3, 5, ..., $\ell - 1$	59-18	deckname <sub>i</sub>	Name of program library deck, 1 to 7 characters, left-justified
	17-00	type <sub>i</sub>	Type of record
		6	Old program library deck (OPL)
		7	Old program library common deck (OPLC)
		10	Old program library directory (OPLD)
2, 4, ..., $\ell$	29-00	random address <sub>i</sub>	Address of deck relative to beginning of file

# COMPRESSED COMPILE FILE (A-MODE)



<u>Field</u>	<u>Description</u>
char set	Character set of record. 0000      63-character set 0064 <sub>8</sub> 64-character set
compressed line	A source statement in compressed form; that is, three or more consecutive blanks (to a maximum of 64) are replaced by a byte of the form 00xx where xx is one less than the number of blanks replaced. One or two spaces are unchanged. If the source line contains 65 or 66 consecutive blanks, they are replaced by 007755 or 00775555, respectively. Sixty seven blanks are replaced by 00770002, 68 blanks are replaced by 00770003, and so on. On a 64-character set program library or compressed compile file, a 00 character (colon) is represented as a 0001 byte. A zero byte (0000) signifies the end of line.

## **LIST OUTPUT**

Depending on list options selected on the Modify control statement, list output for Modify contains the following:

- Input directives
- Status of each deck

Modifiers are listed first, followed by a list of activated lines (or cards), deactivated lines, active lines, and inactive lines as they are encountered. To the left of each line are two flags, a status flag and an activity flag. The status flag can be I (inactive) or A (active). The activity flag can be D (deleted) or A (activated). Following these lines are the processed modifications and errors, if any. The last line contains a count of active lines, inactive lines, and inserted lines.

- Statistics

This includes lists of:

Decks on program library.  
Common decks on program library.  
Decks added by initialization directives.  
Decks on new program library.  
Decks written on compile file.

Completing the statistics is a line containing counts of the number of lines on the compile file and the amount of storage used during the Modify run.

- Errors

Modify prints the line in error above the diagnostic message.

## **MESSAGES**

<u>Message</u>	<u>Explanation</u>
CARD NOT REACHED.	Sequence number exceeds deck range.
COLUMN OUT OF RANGE.	Requested width exceeds maximum allowed (100).
COPY FILE EMPTY.	No information on program library being copied.
CREATION FILE EMPTY.	No source decks on file being used for creation.
CV OPTION INVALID.	CV option other than 63 or 64.
DIRECTIVE ERRORS.	Dayfile message indicating that one or more input directives were in error. Fatal error.
DUPLICATE MODIFIER NAME.	Modifier on IDENT has been used previously for the deck.
ERROR IN ARGUMENTS.	An invalid parameter has been encountered on the OPLEDIT control statement.
ERROR IN DIRECTORY.	The program library contains an error. Fatal error.
ERROR IN MODIFY ARGUMENTS.	Illegal parameter on Modify control statement. Fatal error.
FILE NAME CONFLICT.	The same file cannot be used for both applications without conflict. Fatal error.
FIRST CARD IS AFTER SECOND CARD.	Parameters are erroneous or lines are out of order.
FORMAT ERROR IN DIRECTIVE.	A format error has been detected in a directive.
ILLEGAL DIRECTIVE.	Directive is out of sequence. For example, the CREATE directive is after a modification directive for Modify.

<u>Message</u>	<u>Explanation</u>
ILLEGAL NUMERIC FIELD.	Invalid parameter on Modify or OPLEDIT control statement.
INITIALIZATION DIRECTIVE OUT OF ORDER.	A noninitialization directive was encountered before the initialization directive.
INVALID ATTRIBUTE.	Attribute specified on IF directive is other than EQ, NE, DEF, or UNDEF.
INVALID CS ON INPUT.	The input data uses the 64-character set, but the PL uses the 63-character set.
-LO-ERROR, MUST BE ECTMWDSIA-	Illegal list option requested. Fatal error.
MEMORY OVERFLOW.	Insufficient field length has been specified for OPLEDIT to execute.
MIXED CHARACTER SET OPL.	OPLEDIT detected decks on the program library that are in different character sets (for example, 63 and 64).
MODIFICATION / DIRECTIVE ERRORS.	Modification and/or directive errors are encountered when debug mode is selected.
MODIFICATION ERRORS.	Modify has detected errors during the modification phase; fatal if D option is not selected.
MOD(S) TO MOD BEFORE THIS IDENT CARD.	A modification directive or a different IDENT directive refer to the current modname.
NAMES SEPARATED BY *.* IN WRONG ORDER.	Requested decks not in correct sequence.
NO DIRECTIVES.	Directives file empty. Fatal error.

<u>Message</u>	<u>Explanation</u>
NO *IF IN PROGRESS.	An ELSE or ENDIF directive was encountered without a previous IF directive.
OPERATION ILLEGAL FROM ALTERNATE INPUT.	File manipulation attempted from other than original directives file.
OPLEDIT COMPLETE.	Informative message indicating that OPLEDIT has completed processing.
OPLEDIT ERRORS.	Errors were encountered during OPLEDIT execution.
OVERLAPPING MODIFICATION.	Line modified more than once.
PL ERROR IN DECK deckname.	An error was detected in the program library format during processing of deck named. Fatal error.
PROGRAM LIBRARY EMPTY.	No information on file specified as program library. Fatal error.
RECORD NOT FOUND.	Modify was unable to locate requested record on file specified.
RECURSIVE *IF, S ILLEGAL.	An IF directive was encountered while a previous IF range was still active (no ELSE or ENDIF encountered). Fatal error.
REDUNDANT CONVERSION IGNORED.	An attempt was made to convert the program library file to a like character set (63 to 63 or 64 to 64). Conversion option set to zero.
RESERVED FILE NAME.	Operation attempted on a file name reserved by this utility.
S OPTION ILLEGAL WITH A, X, OR Q.	Source option not legal when A, X, or Q option is selected. Fatal error.

<u>Message</u>	<u>Explanation</u>
TOO MANY OPL FILES.	More than 50 program library files declared.
UNKNOWN DECK.	Unable to locate requested deck on program library.
UNKNOWN MODIFIER.	Modifier not in modification table for deck.
VALUE ERROR.	Value specified on IF or DEFINE directive is greater than 177777B. Fatal error.
X OR Q ILLEGAL WITHOUT COMPILE.	Selection of X or Q option requires that a compile file name be selected.
deckname - INVALID CS, 63 ASSUMED.	The lower byte of word 16B of the prefix table for the named deck on the program library does not contain 0000 or 0064.
deckname - MIXED CHARACTER SET DETECTED.	Upon editing the named deck on the program library, the character set was different from the character set of previously edited decks.

## **OPLEDIT UTILITY**

## DIRECTIVE FORMAT

The format for OPLEDIT directives is identical to that of Modify directives, except that OPLEDIT does not allow the prefix character to be changed (asterisk must be used).

## OPLEDIT DIRECTIVES

EDIT $p_1, p_2, \dots, p_n$	Requests OPLEDIT to edit a program library deck and transfer it to the new program library. The $p_i$ specify deck names or groups of deck names to be edited.
PULLALL or PULLALL modname	Generates a modification set that contains the net effect of all current modification sets (first format) or all modification sets added after and including a specific modification set.
PULLMOD modname <sub>1</sub> , modname <sub>2</sub> , ..., mod- ame <sub>n</sub>	Reconstructs one or more modification sets applied to edited decks specified by modname <sub>i</sub> .
PURGE modname or PURGE modname, *	Removes the effects of a previous modification set or group of modsets subsequent to and including the specified modname.

## OPLEDIT CONTROL STATEMENT

OPLEDIT( $p_1, p_2, \dots, p_n$ )

p      Option  
      Option=value  
      Option=0

<u>option</u>	<u>Significance</u>	
I	Directive input	
	Omitted or I	Directives on INPUT
	I=filename	Directives on named file
I=0		No directive input

<u>Option</u>	<u>Significance</u>	
P	Program library input	
Omitted or P		Program library is on file OPL
P=filename		Program library is on named file
P=0		No program library file
N	New program library output	
N		New program library is written on file NPL
N=filename		New program library written on named file
Omitted or N=0		New program library not written
L	List output	
Omitted or L		List output is written on job OUTPUT file
L=filename		List output is written on named file
L=0		No list output generated
M	Directive output	
Omitted or M		Write output from *PULLMOD and *PULLALL directive on file MODSETS
M=filename		Write directive output on named file
D	Debug	Ignore errors
F	Full edit	Edit all decks

<u>Option</u>	<u>Significance</u>												
LO	List options												
LO=x	Set list options x; each bit in x, if set, turns on corresponding option:												
	<table border="1"> <thead> <tr> <th>x</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>001</td> <td>Errors.</td> </tr> <tr> <td>002</td> <td>Input directives.</td> </tr> <tr> <td>010</td> <td>Modifications made.</td> </tr> <tr> <td>040</td> <td>Deck status.</td> </tr> <tr> <td>100</td> <td>Directory lists.</td> </tr> </tbody> </table>	x	Description	001	Errors.	002	Input directives.	010	Modifications made.	040	Deck status.	100	Directory lists.
x	Description												
001	Errors.												
002	Input directives.												
010	Modifications made.												
040	Deck status.												
100	Directory lists.												
Omitted or LO	Assumes x=153.												
U	Update edit												
Omitted	Generate *EDIT directives for common decks.												
U	Generate *EDIT directives for all decks.												
U=0	Generate no *EDIT directives.												
Z	Directive input												
Omitted	Directives specified by I parameter.												
Z	OPLEDIT control statement contains input directives following the control statement terminator. I parameter is ignored.												

**NOTE**

Do not place a control statement terminator after the directives.

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